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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,052	09/22/2003	Li Ji	SAMS01-00300	7826

23990 7590 05/05/2006

DOCKET CLERK
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EXAMINER

DOAN, PHUOC HUU

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,052

Applicant(s)

JI ET AL.

Examiner

PHUOC H. DOAN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/22/06 has been entered.

Response to Arguments

2. Applicant's arguments filed 03/22/06 have been fully considered but they are not persuasive.

The prior art recited by Yamashita, and Menich are sustained to rely on the rejection.

Applicant's remarks: the Yamashita reference fails to disclose a channel allocator capable of receiving the an access request notification, terminating a first communication link between said first base transceiver station and a first selected one of said plurality of mobile station, wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station of said wireless network and

allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station.

Examiner' response: Yamashita specifically discloses when the mobile station 18 detected that the quality of the channel between the mobile station 18 and base transceiver station 12-1 has deteriorated and that the quality with the base transceiver station 12-2 has improved, **the mobile station 18 notifies the base transceiver 12-1 accordingly step 1002**, upon which a transfer is made to a soft handoff mode (col. 4, lines 35-51), wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station of said wireless network and allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station as indicated in Fig. 2 “the forward traffic information is also transferred from the base transceiver station 12-1 to the base transceiver station 12-2 and then transmitted from the base transceiver station 12-2 onto its radio channel. After that, when the quality of the channel with the base transceiver station 12-1 has deteriorated far enough, the soft handoff mode is terminated (steps 1016, 1018), and a transfer is made to the normal

communication mode in which the mobile station 18 is connected only to the base transceiver station 12-2 (step 1020) (See col. 4, lines 51-67, col. 5, lines 1-36).

Applicant's remarks: the Yamashita reference fails to disclose a method for allocating the plurality of data traffic channels comprising: in response to the access request message detection, terminated first communication link to establish a communication link with said accessing mobile station.

Examiner response: Yamashita specifically discloses the soft handoff mode under the control of the base transceiver station 12-2 is essentially the same as the soft handoff mode under the control of the base transceiver station 12-1, except that the base transceiver station 12-2 takes control and performs inter-cell diversity processing in place of the base transceiver station 12-1 (step 1015), when the quality of the channel with the base transceiver station 12-1 has deteriorated far enough, the soft handoff mode is terminated (steps 1016, 1018), and a transfer is made to the normal communication mode in which the mobile station 18 is connected only to the base transceiver station 12-2 (step 1020) (See col. 4, lines 51-67, col. 5, lines 1-36).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims **21-27, 29-35, and 37-39** are rejected under 35 U.S.C. 102(e) as being anticipated by **Yamashita (US Patent No: 6,108,547)**.

As to claim 21, Yamashita discloses for use in a wireless network comprising a first base transceiver station capable of establishing and maintaining communication links with a plurality of mobile stations by means of a plurality of data traffic channels (Fig. 1, col. 3 through col. 4, lines 65-30), an apparatus for allocating said plurality of data traffic channels comprising: an access request detection circuit capable of detecting an access request message received from an accessing one of said plurality of mobile stations and generating an access request notification (col. 4, lines 35-45); and a channel allocator capable of receiving said access request notification and (col. 4, lines 46-55), in response thereto: 1) terminating a first communication link between said first base transceiver station

and a first selected one of said plurality of mobile stations (col. 5, lines 23-35), wherein said first selected mobile station maintains at least a second communication link with at least a second base transceiver station of said wireless network (col. 5, lines 36-58), and 2) allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station (col. 6, lines 22-60).

As to claim 22, Yamashita further discloses the apparatus as set forth in Claim 21 wherein said channel allocator is capable of determining if one of said plurality of data traffic channels associated with said first base transceiver station is unused prior to terminating said first communication link between said first base transceiver station and said first selected mobile station (col. 4 through col. 5, lines 52-58).

As to claim 23, Yamashita further discloses the apparatus as set forth in Claim 22 wherein said channel allocator allocates an unused one of said plurality of data traffic channels associated with said first base transceiver station to establish a communication link with said accessing mobile station in lieu of terminating said first communication link and allocating said first data traffic channel associated with said terminated first communication link to establish a communication link with said accessing mobile station (col. 6, lines 22-60).

As to claim 24, Yamashita further discloses the apparatus as set forth in Claim 21 further comprising a memory coupled to said channel allocator (Fig. 5, col. 6 through col. 7, lines 60-13), wherein said memory is capable of storing status data associated with said

Plurality of communication links maintained by said first base transceiver station with said plurality of a mobile stations (col. 7, lines 13-55).

As to claim 25, Yamashita further discloses the apparatus as set forth in Claim 24 wherein said status data comprises a received signal strength indicator associated with each of said plurality of communication links (col. 4, lines 35-45).

As to claim 26, Yamashita further discloses the apparatus as set forth in Claim 25 wherein said status data comprises handoff state data indicating whether each mobile station associated with each of said communication links maintains communication links with at least two base transceiver stations (col. 4, lines 13-25).

As to claim 27, Yamashita further discloses the apparatus as set forth in Claim 26 wherein said channel allocator determines a weakest received signal strength indicator associated with one of said plurality of mobile stations maintaining communication links with at least two base transceiver stations (col. 5, lines 28-35).

As to **claim 29**, the claim is rejected for the same reason as set forth in claim 21.

As to **claim 30**, the claim is rejected for the same reason as set forth in claim 22.

As to **claim 31**, the claim is rejected for the same reason as set forth in claim 23.

As to **claim 32**, the claim is rejected for the same reason as set forth in claim 24.

As to **claim 33**, the claim is rejected for the same reason as set forth in claim 25.

As to **claim 34**, the claim is rejected for the same reason as set forth in claim 26.

As to **claim 35**, the claim is rejected for the same reason as set forth in claim 27.

As to **claim 37**, the claim is rejected for the same reason as set forth in claim 21.

As to **claim 38**, the claim is rejected for the same reason as set forth in claim 22.

As to **claim 39**, the claim is rejected for the same reason as set forth in claim 23.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims **28, 36, and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita in view of Menich (**US Patent No: 5,287,544**).

As to **claim 28**, Yamashita discloses all the limitation in claim 27. However, Yamashita does not disclose wherein said channel allocator selects said

communication link associated with said weakest received signal strength indicator to be said terminated first communication link.

Menich specifically discloses wherein said channel allocator selects said communication link associated with said weakest received signal strength indicator to be said terminated first communication link (col. 2 through col. 3, lines 49-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the signal strength indicator to the terminal as taught by Menich to the system of Yamashita in order to prevent of service interruptions.

As to claim 36, the claim is rejected for the same reason as set forth in claim 28.

As to claim 40, the combination of Yamashita and Menich further disclose the method as set forth in claim 37 further comprising the steps of: determining a weakest received signal strength indicator associated with one of a plurality of mobile stations maintaining communication links with the first base transceiver station and at least one other base transceiver station (col. 5, lines 28-35 of Yamashita); and selecting the communication link associated with the weakest received signal strength indicator to be the terminated first communication link (col. 2 through col. 3, lines 49-30 of Menich).

Conclusion

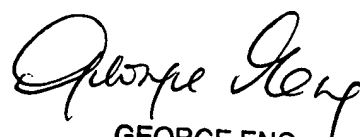
Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H. DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GEORGE ENG can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phuoc Doan
04/17/06



GEORGE ENG
SUPERVISORY PATENT EXAMINER